



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/614,487

07/07/2003

Noah Montena

01561-0019US

7741

32116

7590

08/01/2006

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
500 W. MADISON STREET
SUITE 3800
CHICAGO, IL 60661

EXAMINER

IMAS, VLADIMIR

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/614,487	Applicant(s) MONTENA, NOAH	
	Examiner Vladimir Imas	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☐ Claim(s) 7-12, 14-21, 23-29 and 31-48 is/are rejected.
- 7) ☐ Claim(s) 13, 22 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/30/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

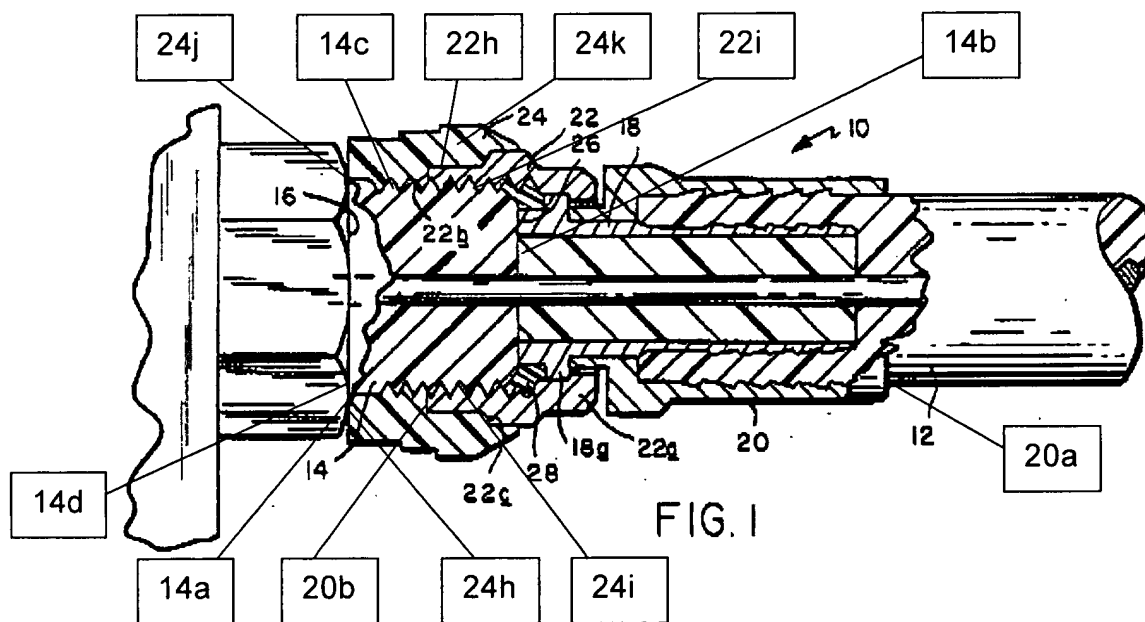
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7-12, 14-21, 23-29, 31-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Szegda (US 4,869,679).

Regarding claims 7, 21, 23, 27 and 34, Szegda, fig. 1-4, discloses in combination: a) a first connecting assembly comprising: a port 14 having a central axis, a radially outwardly facing surface 14a, a first free end 14b, and a second end 16 spaced axially from the first free end, the port having threads 14c on the radially outwardly facing surface; and an axially facing surface 14d; and b) a second connecting assembly for operatively connecting a cable 12 to the port on the first connecting assembly, the second connecting assembly comprising: a tubular fitting (combination 18 + 20 + 22) having a central axis and axially spaced first 20a and second ends 20b, the tubular fitting defining a receptacle 22h for a cable at the first end of the tubular fitting, the tubular fitting further comprising a threaded element 22 with threads 22i which can be engaged with the threads on the port to maintain the first and second connecting assemblies operatively engaged and thereby a cable in the receptacle in the tubular

Art Unit: 2839

fitting operatively connected to the port, the threads on the threaded element bounding a first effective diameter; and c) a sealing assembly, the first and second connecting assemblies operatively engageable by i) relatively situating the first and second connecting assemblies in a pre-assembly state wherein the first and second connecting assemblies are separated from each other, ii) relatively moving the first and second connecting assemblies from the pre-assembly state to engage the threads on the port and threaded element, and iii) rotating at least one of the port and threaded element



relative to the other of the port and threaded element to cause the threads on the port and threaded element to interact and thereby cause the threaded element to move axially relative to the port in a first direction from the first free end towards the second end of the port into a secured position, the sealing assembly comprising a first sealing

Art Unit: 2839

surface 24h that abuts to the axially facing surface on the first connecting assembly with the threaded element in the secured position, the sealing assembly comprising a sealing portion 24i with a second sealing surface 24j, the sealing portion having a first state and a deformed state, wherein the sealing portion is caused to be changed from the first state into the deformed state and the second sealing surface is caused to thereby be moved sealingly radially inwardly against the radially outwardly facing surface on the port as an incident of the threaded element moving in the first axial direction with the first sealing surface abutted to the axially facing surface of the first connecting assembly, wherein the sealing assembly and tubular fitting are maintained together as a unitary assembly with the second connecting assembly separated from the first connecting assembly.

Regarding claim 8, Szegda discloses the second sealing surface has an unthreaded, continuous annular shape.

Regarding claim 9, Szegda discloses the threads on the port have a second effective diameter and with the sealing portion in the first state, the inside effective diameter is greater than the second effective diameter.

Regarding claim 10, Szegda discloses the tubular fitting has a first surface and the sealing assembly has a second surface and with the first sealing surface abutted to the axially facing surface of the first connecting assembly, continued movement of the threaded element in the first axial direction causes the first and second surfaces to interact to thereby change the sealing portion from the first state into the deformed state.

Regarding claim 11, Szegda discloses the at least one of the first and second surface, as viewed in cross section in a plane extending through the central axis of the tubular fitting, has a straight shape extending along a line that is not parallel to the central axis of the tubular fitting.

Regarding claim 12, Szegda discloses the threaded element has a first cam surface and the sealing element has a second cam surface, and with the first sealing surface abutted to the axially facing surface of the first connecting assembly, continued movement of the threaded element in the first axial direction causes the first and second cam surfaces to interact so as to exert a radially inward force on the sealing portion as the sealing portion is changed from the first state into the deformed state.

Regarding claims 13, 22 and 30, Szegda discloses the sealing portion comprises an O-ring.

Regarding claim 14, Szegda discloses the sealing assembly has a third surface and with the first sealing surface abutted to the axially facing surface of the first connecting assembly, continued movement of the threaded element in the first axial direction causes the sealing portion to be compressed between the first and third surfaces so as to expand radially inwardly to cause the second sealing surface to be moved radially inwardly sealingly against the radially outwardly facing surface on the port.

Regarding claim 15, Szegda discloses the sealing assembly comprises a wall and the first sealing surface and third surface are defined by the wall and face axially oppositely to each other.

Art Unit: 2839

Regarding claim 16, 24 and 31, Szegda discloses the first and second sealing surfaces are defined by a single piece.

Regarding claim 17, 25 and 32, Szegda discloses the first and second sealing surfaces are defined by first and second separate discrete elements.

Regarding claim 18, 26 and 33, Szegda discloses the sealing assembly and tubular fitting are maintained together as a unitary assembly with the second connecting assembly separated from the first connecting assembly.

Regarding claim 19, Szegda discloses the sealing assembly defines first and second axially oppositely facing shoulders 24c, the tubular fitting defines third and fourth axially oppositely facing shoulders 22a, the first shoulder confronts the third shoulder to confine relative movement between the sealing assembly and tubular fitting in an axial direction towards each other and the second shoulder confronts the fourth shoulder to confine relative movement between the sealing assembly and tubular fitting in an axial direction away from each other.

Regarding claim 20, Szegda discloses the tubular fitting comprises a radially outwardly opening annular groove and the sealing assembly comprises a radially inwardly projecting bead which extends into the annular groove.

Regarding claim 28, Szegda discloses the sealing assembly comprises a wall which is abutable to the axially facing surface of the first connecting assembly, the wall having a third surface facing oppositely to the axially facing surface of the first connecting assembly, and the sealing portion of the sealing assembly is compressed between the first and third surfaces as the second sealing surface is caused to be

Art Unit: 2839

moved radially inwardly sealingly against the radially outwardly facing surface on the port.

Regarding claim 29, Szegda discloses the at least one of the first and second surfaces, as viewed in cross-section in a plane extending through the central axis of the tubular fitting, has a straight shape extending along a line that is not parallel to the central axis of the tubular fitting.

Regarding claim 35, Szegda discloses a method of operatively connecting a cable to a port, the method comprising the steps of: providing a first connecting assembly comprising: a) a port with a central axis, a radially outwardly facing surface having threads thereon, a first free end, and a second end spaced axially from the first free end; and b) an axially facing surface, providing a second connecting assembly comprising a) tubular fitting with a central axis and axially spaced first and second ends and comprising a threaded element with threads and b) a sealing assembly having a sealing portion, aligning the first and second connecting assemblies in a pre-assembly state with the first and second connecting assemblies separated from each other, relatively axially moving the first and second connecting assemblies to engage the threads on the port and the tubular fitting, rotating at least one of the port and threaded element relative to the other of the port and threaded element to cause the threads to interact and thereby cause the threaded element to move axially relative to the port in a first direction from the first free end towards the second free end; and as an incident of moving the threaded element axially in the first direction, causing the sealing portion to

Art Unit: 2839

be deformed radially inwardly to engage sealingly with the outwardly facing surface on the port.

Regarding claim 36, Szegda discloses the step of causing the sealing assembly to sealingly engage the axially facing surface on the first connecting assembly as an incident of moving the threaded element axially in the first direction.

Regarding claim 37, Szegda discloses the step of causing the sealing portion to be deformed radially inwardly comprises causing the sealing portion to be changed from a) a first state wherein a sealing surface is spaced from the outwardly facing surface on the port into b) a deformed state wherein the sealing surface is pressed against the outwardly facing surface on the port.

Regarding claim 38, Szegda discloses the step of causing the sealing portion to be deformed radially inwardly comprises producing a compressive axial force on the sealing portion to cause the sealing portion to be deformed radially inwardly.

Regarding claim 39, Szegda discloses the step of causing the sealing portion to be deformed radially inwardly comprises producing an axial compressive force on the sealing portion between the second connecting assembly and a part of the sealing assembly.

Regarding claim 40, Szegda discloses the step of providing a second connecting assembly comprises providing a tubular fitting and sealing assembly that are maintained together as a unitary assembly with the second connecting assembly separated from the first connecting assembly.

Regarding claim 41, Szegda discloses a cable connecting assembly for connection to a port, the cable connecting assembly comprising: a sealing assembly; and a tubular fitting for receiving a cable and having a central axis, the sealing assembly comprising a first sealing surface facing axially relative to the central axis and a second sealing surface facing radially relative to the central axis, each to sealingly engage a port to which the cable connecting assembly is connected, the tubular fitting comprising a cylindrical body with internal threads to engage a port to which the cable connecting assembly is connected and a surface facing radially outwardly relative to the central axis, the cylindrical body and sealing assembly having a cooperating groove and bead, one each on the radially outwardly facing surface of the cylindrical body and the sealing assembly, to maintain the sealing assembly and the tubular fitting together as a unitary assembly preparatory to connecting the cable connecting assembly to a port.

Regarding claim 42 and 48, Szegda discloses the cable connecting assembly in combination with a port with external threads that engage the internal threads and wherein as the internal and external threads are engaged, the second sealing surface is urged with a progressively increasing sealing force against the port.

Regarding claim 43 and 45, Szegda discloses the cable connecting assembly wherein there are two cooperating pairs of shoulders that abut to limit opposite relative axial movement between the cylindrical body and sealing assembly.

Regarding claim 44, Szegda discloses the a sealing assembly for use with a coaxial connector for connection to a port having a central axis, the sealing assembly comprising: a cylindrical body at one end of the coaxial connection, the cylindrical body

Art Unit: 2839

having an internal surface, at least a portion of which is threaded, and an external surface, a groove and bead, provided one each on the sealing assembly and external surface of the cylindrical body, the bead extending into the groove with the sealing assembly and cylindrical body in a pre-assembled state wherein the sealing assembly and cylindrical body are maintained together as a unitary assembly, the sealing assembly having a first port sealing surface facing axially relative to the central axis and a second port sealing surface facing radially relative to the central axis.

Regarding claim 46, Szegda discloses the cylindrical body is configured to accommodate a conventional wrench to facilitate turning of the cylindrical body around the central axis.

Regarding claim 47, Szegda discloses the external surface of the cylindrical body comprises at least two flat surfaces that can be engaged by a conventional wrench.

Allowable Subject Matter

3. Claims 1-6 are allowed.
4. Claims 13, 22 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The Prior Art of records does not disclose "the sealing portion comprises an O-ring", defined by claims 13, 22, and 30.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed July 3, 2006 have been fully considered but they are not persuasive.

Regarding claim 7, the Attorney has argued "The second sealing surface is characterized as having an inside effective diameter that is greater than the first effective diameter with the sealing portion in the first state. This arrangement facilitates direction of the second sealing surface axially over the threads on the port without interference". The Examiner respectfully disagrees. The sealing assembly is fitted over the port and hence has "inside effective diameter greater than the first diameter in first state". As to argument "This arrangement facilitates direction of the second sealing surface axially over the threads on the port without interference", this limitation is not part of the claim.

Regarding claim 21, the Attorney has argued "It is only coincidental that the surface 24d is angled as shown, but this angled relationship does not produce the recited wedging action". The Examiner respectfully disagrees. The assembly of sealing assembly clearly discloses angled surface, fig. 2, and when threads of first connecting assembly and second connection assembly are mated. It would produce wedge effect.

Art Unit: 2839

Regarding claims 27, 34, 35, 41 and 44, the Attorney has argued "Szegda's element 24 is pre-attached to the port by being threaded thereon. Movement of the threaded element does not cause the sealing surface to be moved into contact with a port, as claimed". The Examiner respectfully disagrees. Due to resilient nature of element 24, upon movement of threaded element 22, element 24 will seal with the port.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vladimir Imas whose telephone number is 571-272-8288. The examiner can normally be reached on 8:00 a.m. to 5:00 p.m..

Art Unit: 2839

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

✓
Examiner
Vladimir Imas
07/21/2006


TULSIDAS C. PATEL
SUPERVISORY PATENT EXAMINER